# **All About insulin**

A Guide for Patients/Families



This brochure provides information about Insulin, it is designed to respond to questions most frequently asked by patients.





#### What is Insulin?

- Insulin is a hormone produced by the pancreas
- Carries glucose from the blood into the cells where it is used for energy.
- Lowers blood sugar

#### What are the different types of Insulin?

- Rapid-acting Lispro
- · Short-acting Regular
- · Intermediate Lente, NPH
- Long-acting Ultralente, Glargine
- Pre-mixed insulin 70/30

#### How to store Insulin:

- Open insulin vials can be stored between 2°C 30°C for a duration of 28 days;
- Unopened insulin vials stored in the refrigerator can be used until expiry date:
- Store insulin pens at room temperature.

#### Insulin dose Varies, depending upon several factors:

- 1. Blood glucose;
- 2. Food;
- 3. Physical activity level;
- 4. Age;
- 5. Body weight;
- Insulin resistance.

# Types of Insulin Syringes available:

Disposable 100 units.

### How to prepare Insulin Injections:

#### **Syringe and Vial Method**

### **Supplies**

- Insulin vials:
- Insulin syringe;
- Alcohol wipe (preferable);
- · Sharps container (wide mouth bottle).





# 1. Procedure for Premixed (70/30) or Nph Insulin

1. Wash hand



2. Roll the milky insulin vial between palms to mix



3. Clean the insulin vial with alcohol swab



4. Pull the plunger down to number of units to be administered.



5. Inject air into bottle.



- 6. Take out required dose.
- 7. Remove air bubbles

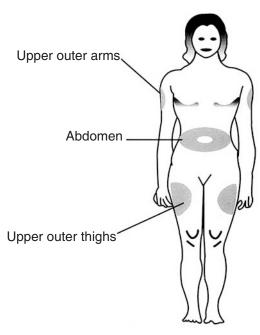


# 2. Mixing of two Vial Insulin

- 1. Pull the plunger down to number of units to be administered.
- 2. Inject air in both insulin bottles
- 3. Initially fill regular or plain insulin
- 4. Then fill the milky insulin
- 5. Remove air bubbles



### **Insulin Injection Sites**





### 1. Insulin administration

1. Clean the injection site with water or Alcohol swab.



2. Pinch the area



3. Inject insulin slowly at 90° angle



4. Keep the needle inserted for 10 second



5. Pull the needle straight out of the skin



- 7. Do not massage the area
- 8. Discard the syringe properly.

#### 3. Prefilled Pens

#### **Supplies:**

- Verify insulin type;
- Pen device (with cartridge);
- Pen needle:
- Alcohol wipe;
- Sharps container;

#### **Procedure:**

- Gather supplies;
- Wash hands;
- Screw on pen needle;
- Make sure that the pen is on zero;
- Set the required dose;
- Choose injection site;
- · Pinch up the skin;
- Insert the needle into the skin at 90° angle;
- Release pinched skin;
- · Push down on the plunger;
- Count to "10":
- Remove and dispose of pen needle.





# For further information, please call:

Diabetes Clinic

Mon. - Fri. 8:00 am - 5:00 pm

Sat. 8:00 am - 12 Noon

Aga Khan University Hospital

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**Emergency Ward** 

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